

# Performance Monitoring for Accelerated Construction

By W. Allen Marr, P.E.

Accelerated construction is receiving a lot of attention as one approach to rehabilitating, expanding, and replacing our physical infrastructure with a minimum of disruption to ongoing activities. The American Association of State Highway and Transportation Officials (AASHTO) has identified it as a priority implementation approach for maintaining and upgrading our nation's highway system.

## Challenges Faced By Geotechnical Engineers

Accelerated construction involves several aspects which challenge traditional geotechnical approaches. Time is short. Flexibility is essential. New materials and new methods are the norm. A plethora of new methods are rapidly appearing, such as ACIP (auger cast in place piles), CFA (continuous flight auger piles), CMC (controlled modulus columns), CSP (cased secant piles), CSV (combined soil stabilization), DSM (deep soil mixing), EPS geofoam (expanded polystyrene), GEC (geotextile encased columns), MSE (mechanically stabilized earth) and PSE (pile supported embankment).

